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BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Application Number: 09/712,790
Filing Date: November 14, 2000
Appellant(s): ELDERING ET AL.

_____
Andrew W. Spicer
For Appellant

EXAMINER'S ANSWER

This is in response to the appeal brief filed 06/16/09 appealing from the Office action

mailed 08/27/08.

(1) Real Party in Interest

A statement identifying by name the real party in interest is contained in the brief.

(2) Related Appeals and Interferences

The following are the related appeals, interferences, and judicial proceedings known to the examiner which may be related to, directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal:

Patent application 09/742,852 including BPAI decision dated 03/26/09.

(3) Status of Claims

The statement of the status of claims contained in the brief is correct.

(4) Status of Amendments After Final

The appellant's statement of the status of amendments after final rejection contained in the brief is correct.

(5) Summary of Claimed Subject Matter

The summary of claimed subject matter contained in the brief is correct.

(6) Grounds of Rejection to be Reviewed on Appeal

The appellant's statement of the grounds of rejection to be reviewed on appeal is substantially correct. The changes are as follows:

The publication number listed for Doherty is incorrect. The correct number is

2003/0200128 A1.

(7) Claims Appendix

The copy of the appealed claims contained in the Appendix to the brief is correct.

(8) Evidence Relied Upon

6,698,020	Zigmond et al.	02-2004
2003/0200128 A1	Doherty	10-2003
6,505,169	Bhagavath et al.	09-2000

(9) Grounds of Rejection

The following ground(s) of rejection are applicable to the appealed claims:

Claims 1, 2, 7, 8, 10, 12-18, 60, 62-65, 68-105 are rejected under 35 U.S.C. 103(a) as

being unpatentable over Zigmond in view of Doherty.

As to claim 1, Zigmond discloses a method of selectively inserting

advertisements into a programming stream (column 4, lines 7-15) at different receiving

nodes of a communications network (households receiving broadcast television signals;

column 7, lines 13-36), said method comprising:

(a) transmitting the programming stream from a central location (Fig. 3, content

provider, 50) to one or more receiving nodes (households, 56 receiving broadcast

signals; column 7, lines 1-12);

(b) storing advertisements (column 17, lines 21-28 and column 11, lines 31-49) at a node of said network (storing ads in ad repository, 86; Fig. 5, column 15, lines 24-34), each advertisement being previously matched to one or more subscribers associated with one of said receiving nodes (wherein only ads selected by the ad selection criteria for a subscriber are sent to memory and stored; Fig 5; column 15, lines 16-23 and column 11, lines 31-49);

(d) selling specific slots to third parties (wherein third party advertisers contract to have their ads inserted to consumers; see Zigmond at column 8, lines 22-29 and column 14, lines 17-21).

(e) determining at each of said receiving nodes (through a received trigger), one or more intervals in said programming stream within which advertisements may be inserted (column 15, lines 35-44);

(g) inserting said advertisement into said programming stream at said receiving node within said determined one or more intervals (column 15, lines 57-65).

While Zigmond discloses information determining the next advertisement to inserted (selection criteria; Fig. 6, step 110), corresponding to a subset of said plurality of receiving nodes (corresponding to a particular viewer; column 11, lines 35-49) and responsive to said determination, retrieving the next advertisement (Fig. 6, step 110; column 17, lines 23-32), he fails to specifically disclose storing a queue, said queue comprising an ordered list of advertisement resource locators (ARLs) and a plurality of queue slots, each of said ARL's comprising data disclosing a location of a corresponding advertisement, retrieving from said queue one of said ARLs in

accordance with said order and wherein the sold specific queue slots at least partially

determine the order of the ARLs in said ordered list.

In an analogous art, Doherty discloses a system for displaying targeted

advertising (Fig. 1; paragraph 25, lines 1-6) wherein a scheduler (140, Fig. 1) will

assemble and store a queue (the schedule; paragraph 29) comprising an ordered list of

references (or ARLs) disclosing a location of a corresponding advertisement (paragraph

28, lines 3-7 and paragraph 29) and queue slots (paragraph 25), based upon

advertisement priorities (paragraph 40), to determine the order in which advertisements

are to be displayed (paragraph 38) wherein locations in the ordered list are sold to

advertisers (advertisers pay a fee for their ads to be included and displayed; paragraphs

40, 46, 48 and 49) and wherein the sold locations at least partially determine the order

of the ARLs in said ordered list (wherein advertisers pay to increase their ad priority and

playback time; paragraphs 40, 46, 48 and 49) for the typical benefit of allowing the

system provider additional revenue while allowing advertisers to control the display of

their advertisement as desired (paragraphs 40, 46, 48 and 49) and allowing the use of

higher compression storage techniques while ensuring that advertisements are properly

prepared when needed for output (paragraph 28, lines 1-11 and paragraph 38, lines 4-

9).

It would have been obvious to one of ordinary skill in the art at the time of

invention by applicant to modify Zigmond's system to include storing a queue, said

queue comprising an ordered list of advertisement resource locators (ARLs) and a

plurality of queue slots, each of said ARL's comprising data disclosing a location of a

corresponding advertisement, retrieving from said queue one of said ARLs in accordance with said order and wherein the sold specific queue slots at least partially determine the order of the ARLs in said ordered list, as taught by Doherty, for the typical benefit of allowing the system provider additional revenue while allowing advertisers to control the display of their advertisement as desired and allowing the use of higher compression storage techniques while ensuring that advertisements are properly prepared when needed for output.

As to claim 2, Zigmond and Doherty disclose wherein said programming stream includes indicators that identify the start of an avail (encoded trigger signal; see Zigmond at column 15, lines 45-52) in said programming stream for insertion of an advertisement (see Zigmond at column 15, lines 35-37), wherein step (e) includes detecting said indicators (see Zigmond at column 15, lines 57-61) and wherein step (g) includes inserting said advertisement into said avail (see Zigmond at column 15, lines 57-61).

As to claim 7, Zigmond and Doherty disclose wherein said queues are stored locally at said receiving nodes to which they correspond (wherein the queue is locally generated and stored; see Doherty at Fig. 1-2, paragraph 29).

As to claim 8, Zigmond and Doherty disclose wherein step (a) includes receiving a plurality of channels of television programming (see Zigmond at column 7, lines 1-12

and 14-28) and selecting one of said channels (the currently tuned program channel;

see Zigmond at column 13, lines 14-39 and column 15, lines 45-49), wherein step (e)

includes detecting said avails in said selected channel (triggers in the current channel;

see Zigmond at column 15, lines 45-52) and wherein step (g) includes inserting said

advertisements into said avails in said selected channel (inserting ads into the current

monitored stream; see Zigmond at column 15, lines 57-65).

As to claim 10, Zigmond and Doherty disclose wherein step (b) includes storing

said advertisements at said receiving node (ad repository, 86 in ad insertion device 80;

see Zigmond at Fig. 5, column 15, lines 24-34).

As to claim 12, Zigmond and Doherty disclose wherein step (d) includes selling

the specific queue slots to advertisers (wherein third party advertisers contract to have

their ads inserted to consumers; see Zigmond at column 8, lines 22-29 and column 14,

lines 17-21).

As to claim 13, Zigmond and Doherty disclose wherein step (d) includes selling

the specific queue slots (selling a predetermined number of ad exposures; see Zigmond

at column 8, lines 22-29) based at least partially on a repetition rate within said queue of

said sold slots (wherein the ad is repeated a set number of times within a given time

period; see Zigmond at column 13, lines 40-45).

As to claim 14, Zigmond and Doherty disclose wherein said repetition rate is non-linear (wherein the ad is blocked after a set number of presentations, which stops the ad from repeating at the same rate, to prevent frustration from viewers; see Zigmond at column 13, lines 40-47).

As to claim 15, Zigmond and Doherty disclose (h) recording a portion of said stream for subsequent playback (see Zigmond at column 3, lines 9-12 and column 14, lines 1-12).

As to claim 16, Zigmond and Doherty disclose wherein step (g) includes inserting said advertisements into said stream as the stream is being recorded (wherein the system inserts ads into the received stream being recorded whenever the indicator appears; see Zigmond at column 14, lines 1-12 and column 15, lines 45-65).

As to claim 17, Zigmond and Doherty disclose wherein step (g) includes inserting said advertisements into said stream when the stream is played back (replacing older ads with newer ones in the recorded material; see Zigmond at column 14, lines 1-12).

As to claim 18, Zigmond and Doherty disclose wherein step (g) includes inserting said advertisements into said stream (the current video stream being received and displayed) between the time the stream is recorded and the time it is played back (when a program is recorded and played back at a later time, such as the next day, the system

would be continuing to insert ads into the received video stream during that time period; see Zigmond at column 17, lines 21-32).

As to claim 73, Zigmond and Doherty disclose wherein the retrieved ARL is not dependent on a selection of a corresponding advertisement (see Zigmond at column 16, line 65-column 17, line 9).

As to claim 74, Zigmond and Doherty disclose wherein the ARLs are not linked to the determined interval until the ARL is retrieved from the queue (wherein the next ads are selected independent of the upcoming interval; see Zigmond at Fig. 6; column 17, lines 21-32).

As to claim 75, Zigmond and Doherty disclose wherein the order of the ARLs in the ordered list is independent of the substance of the advertisements corresponding to the ARLs in the queue (wherein the ads are selected based upon the advertisers desire to target particular demographics; see Zigmond at column 14, lines 35-58).

As to claim 79, Zigmond discloses a method of inserting advertisements into a programming stream (column 4, lines 7-15) in a communications network (column 7, lines 13-36), said method comprising:

(a) transmitting the programming stream from a central location (Fig. 3, content provider, 50) to one or more receiving nodes (households, 56 receiving broadcast signals; column 7, lines 1-12);

(b) storing said programming stream at one or more receiving nodes (column 14, lines 1-12);

(d) selling specific slots to third parties (wherein third party advertisers contract to have their ads inserted to consumers; see Zigmond at column 8, lines 22-29);

(e) retrieving the stored programming stream from the one or more receiving nodes to create a retrieved programming stream (displaying the recorded programming; column 14, lines 1-12);

(f) detecting one or more intervals in said retrieved programming stream (through a received trigger) within which advertisements may be inserted (column 15, lines 35-44); and

(g) inserting said advertisement into said retrieved programming stream at said receiving node within said determined one or more intervals (column 15, lines 57-65).

While Zigmond discloses information determining the next advertisement to inserted (selection criteria; Fig. 6, step 110), corresponding to a subset of said plurality of receiving nodes (corresponding to a particular viewer; column 11, lines 35-49) and responsive to said determination, retrieving the next advertisement (Fig. 6, step 110; column 17, lines 23-32),

he fails to specifically disclose storing one or more queues, each queue associated with one or more subscribers, comprising an ordered list of advertisements

and a plurality of queue slots and inserting said unscheduled advertisements in
accordance with said ordered list and wherein the sold specific queue slots at least
partially determine the order of the ARLs in said ordered list.

In an analogous art, Doherty discloses a system for displaying targeted
advertising (Fig. 1; paragraph 25, lines 1-6) wherein a scheduler (140, Fig. 1) will
assemble and store a queue (the schedule; paragraph 29) comprising an ordered list of
references (or ARLs) disclosing a location of a corresponding advertisement (paragraph
28, lines 3-7 and paragraph 29) and queue slots (paragraph 25), based upon
advertisement priorities (paragraph 40), to determine the order in which advertisements
are to be displayed (paragraph 38) wherein locations in the ordered list are sold to
advertisers (advertisers pay a fee for their ads to be included and displayed; paragraphs
40, 46, 48 and 49) and wherein the sold locations at least partially determine the order
of the ARLs in said ordered list (wherein advertisers pay to increase their ad priority and
playback time; paragraphs 40, 46, 48 and 49) for the typical benefit of allowing the
system provider additional revenue while allowing advertisers to control the display of
their advertisement as desired (paragraphs 40, 46, 48 and 49) and allowing the use of
higher compression storage techniques while ensuring that advertisements are properly
prepared when needed for output (paragraph 28, lines 1-11 and paragraph 38, lines 4-
9).

It would have been obvious to one of ordinary skill in the art at the time of
invention by applicant to modify Zigmond's system to include storing one or more
queues, each queue associated with one or more subscribers, comprising an ordered

list of advertisements and a plurality of queue slots and inserting said unscheduled

advertisements in accordance with said ordered list and wherein the sold specific queue

slots at least partially determine the order of the ARLs in said ordered list, as taught by

Doherty, for the typical benefit of allowing the system provider additional revenue while

allowing advertisers to control the display of their advertisement as desired and allowing

the use of higher compression storage techniques while ensuring that advertisements

are properly prepared when needed for output.

As to claim 80, Zigmond and Doherty disclose wherein the order of the

advertisements in the queues is independent of the substance programming stream

(wherein the advertisements to be displayed are dependent upon the user's viewing

habits or demographics, and not upon the program; see Zigmond at column 13, lines 7-

13, column 14 lines 13-58 and column 17, lines 21-26).

As to claim 81, Zigmond and Doherty disclose wherein each of the one or more

queues is associated with a channel in the programming stream (wherein the

advertisements to be displayed, and therefore the queue holding them, are dependent

upon, and therefore associated with, the current channel being viewed; see Zigmond at

column 12, lines 47-53).

As to claim 82, Zigmond and Doherty disclose wherein step (a) includes

transmitting a plurality of channels within the programming stream and selecting one of

said channels (see Zigmond at column 11, lines 15-18), and wherein step (g) includes

inserting the advertisements (see Zigmond at column 15, lines 57-65) from a queue

associated with the selected channel (wherein the advertisements to be displayed, and

therefore the queue holding them, are dependent upon, and therefore associated with,

the current channel being viewed; see Zigmond at column 12, lines 47-53) into the

detected intervals in the selected channel (see Zigmond at column 15, lines 57-65).

As to claim 83, Zigmond and Doherty disclose wherein the queues are stored at

the subscriber node (wherein the queue is locally generated and stored; see Doherty at

Fig. 1-2, paragraph 29).

As to claim 84, Zigmond and Doherty disclose wherein the specific queue slots

are sold to advertisers (wherein third party advertisers contract to have their ads

inserted to consumers; see Zigmond at column 8, lines 22-29 and column 14, lines 17-

21).

As to claim 85, Zigmond and Doherty disclose wherein the specific queue slots

are sold (selling a predetermined number of ad exposures; see Zigmond at column 8,

lines 22-29) based at least partially on a repetition rate within the queue of the sold

specific queue slots (wherein the ad is repeated a set number of times within a given

time period; see Zigmond at column 13, lines 40-45).

As to claim 86, Zigmond and Doherty disclose wherein said repetition rate is non-linear (wherein the ad is blocked after a set number of presentations, which stops the ad from repeating at the same rate, to prevent frustration from viewers; see Zigmond at column 13, lines 40-47).

As to claim 87, Zigmond and Doherty disclose (h) recording a portion of said programming stream for subsequent playback (see Zigmond at column 3, lines 9-12 and column 14, lines 1-12).

As to claim 88, Zigmond and Doherty disclose wherein the advertisements are inserted into said programming stream as the stream is being recorded (wherein the system inserts ads into the received stream being recorded whenever the indicator appears; see Zigmond at column 14, lines 1-12 and column 15, lines 45-65).

As to claim 89, Zigmond and Doherty disclose wherein the advertisements are inserted into said programming stream when the stream is played back (replacing older ads with newer ones in the recorded material; see Zigmond at column 14, lines 1-12).

As to claim 90, Zigmond and Doherty disclose wherein the advertisements are inserted into said programming stream (the current video stream being received and displayed) between the time the stream is recorded and the time it is played back (when a program is recorded and played back at a later time, such as the next day, the system

would be continuing to insert ads into the received video stream during that time period;
see Zigmond at column 17, lines 21-32).

As to claim 91, Zigmond and Doherty disclose wherein the inserted
advertisement is not dependent on a selection of that advertisement (see Zigmond at
column 16, line 65-column 17, line 9).

As to claim 92, Zigmond and Doherty disclose wherein the advertisements are
not linked to the detected one or more intervals until the advertisement is inserted into
the detected intervals (wherein the next ads are selected independent of the upcoming
interval; see Zigmond at Fig. 6; column 17, lines 21-32).

As to claim 93, Zigmond and Doherty disclose wherein the order of the
advertisements in the ordered list is independent of the substance of the advertisements
in the queue (wherein the ads are selected based upon the advertisers desire to target
particular demographics; see Zigmond at column 14, lines 35-58).

As to claims 94 and 96, Zigmond and Doherty disclose wherein the order of the
advertisements is independent of the timing of the detected intervals (wherein ads are
inserted based upon time independent information, such as program content, ratings
and user preferences, habits and demographics; column 12, line 44-column 13, line 12,
column 13, lines 48-58 and column 14, lines 13-58).

As to claim 97, Zigmond discloses a method of inserting advertisements into a programming stream in a communications network (column 4, lines 7-15), the method comprising:

(a) transmitting said programming stream from a central location (Fig. 3, content provider, 50) to one or more receiving nodes (households, 56 receiving broadcast signals; column 7, lines 1-12);

(c) selling specific locations to third parties (wherein third party advertisers contract to have their ads inserted to consumers; see Zigmond at column 8, lines 22-29 and column 14, lines 17-21).

(d) detecting one or more intervals in said programming stream within which advertisements may be inserted (column 15, lines 35-44);

(e) inserting advertisements into said programming stream within said detected one or more intervals (column 15, lines 57-65).

While Zigmond discloses information determining the next advertisement to inserted (selection criteria; Fig. 6, step 110), corresponding to a subset of said plurality of receiving nodes (corresponding to a particular viewer; column 11, lines 35-49) and responsive to said determination, retrieving the next advertisement (Fig. 6, step 110; column 17, lines 23-32), each advertisement being previously matched to one or more subscribers associated with one of said receiving nodes (wherein only ads selected by the ad selection criteria for a subscriber are sent to memory and stored; Fig 5; column 15, lines 16-23 and column 11, lines 31-49), he fails to specifically disclose storing a

queue, said queue comprising a plurality of queue locations and wherein the sold specific queue slots at least partially determine the order of the advertisements in said ordered list.

In an analogous art, Doherty discloses a system for displaying targeted advertising (Fig. 1; paragraph 25, lines 1-6) wherein a scheduler (140, Fig. 1) will assemble and store a queue (the schedule; paragraph 29) comprising an ordered list of references (or ARLs) disclosing a location of a corresponding advertisement (paragraph 28, lines 3-7 and paragraph 29) and queue slots (paragraph 25), based upon advertisement priorities (paragraph 40), to determine the order in which advertisements are to be displayed (paragraph 38) wherein locations in the ordered list are sold to advertisers (advertisers pay a fee for their ads to be included and displayed; paragraphs 40, 46, 48 and 49) and wherein the sold locations at least partially determine the order of the ARLs in said ordered list (wherein advertisers pay to increase their ad priority and playback time; paragraphs 40, 46, 48 and 49) for the typical benefit of allowing the system provider additional revenue while allowing advertisers to control the display of their advertisement as desired (paragraphs 40, 46, 48 and 49) and allowing the use of higher compression storage techniques while ensuring that advertisements are properly prepared when needed for output (paragraph 28, lines 1-11 and paragraph 38, lines 4-9).

It would have been obvious to one of ordinary skill in the art at the time of invention by applicant to modify Zigmond's system to include storing a queue, said queue comprising a plurality of queue locations and wherein the sold specific queue

slots at least partially determine the order of the advertisements in said ordered list, as taught by Doherty, for the typical benefit of allowing the system provider additional revenue while allowing advertisers to control the display of their advertisement as desired and allowing the use of higher compression storage techniques while ensuring that advertisements are properly prepared when needed for output.

As to claim 98, Zigmond and Doherty disclose wherein the advertisements in the queues are independent of the timing of the detected intervals (wherein ads are inserted based upon time independent information, such as program content, ratings and user preferences, habits and demographics; column 12, line 44-column 13, line 12, column 13, lines 48-58 and column 14, lines 13-58).

As to claim 99, Zigmond and Doherty disclose wherein each of the one or more queues is associated with a specific channel in the programming stream (associated with the currently viewed channel; column 12, line 44-column 13, line 6).

As to claim 100, Zigmond and Doherty disclose wherein step (a) includes transmitting a plurality of channels within the programming stream and selecting one of said channels (column 12, line 44-column 13, line 28), and wherein step (e) includes inserting the advertisements from a queue associated with the selected channel into the detected intervals in the selected channel (associated with the currently viewed channel; column 12, line 44-column 13, line 6).

As to claim 101, Zigmond and Doherty disclose wherein the specific individual queue slots are sold to advertisers (wherein third party advertisers contract to have their ads inserted to consumers; see Zigmond at column 8, lines 22-29 and column 14, lines 17-21).

As to claim 102, Zigmond and Doherty disclose wherein the specific individual queue slots are sold (selling a predetermined number of ad exposures; see Zigmond at column 8, lines 22-29) at least partially on a repetition rate within the queue of the sold individual queue locations (wherein the ad is repeated a set number of times within a given time period; see Zigmond at column 13, lines 40-45).

As to claim 103, Zigmond and Doherty disclose wherein the order of the in the ordered list is independent of the substance of the advertisements in the queue (wherein ads are inserted based upon time of day; column 13, lines 59-67).

As to claim 60, Zigmond discloses a method of inserting advertisements into programming stream (column 4, lines 7-15) in a communications network (Fig. 3; column 7, lines 13-36), said method comprising:

(a) transmitting said programming stream from a central location (Fig. 3, content provider, 50) to one or more receiving nodes (households, 56 receiving broadcast signals; column 7, lines 1-12);

(c) selling specific slots to third parties (wherein third party advertisers contract to have their ads inserted to consumers; see Zigmond at column 8, lines 22-29);

(d) detecting one or more intervals in said programming stream (through a received trigger) within which advertisements may be inserted (column 15, lines 35-44);

(e) inserting advertisements into said programming stream within said detected intervals (column 15, lines 57-65), wherein the order of the advertisements is independent of the timing of the determined one or more intervals (wherein ads are inserted based upon time independent information, such as program content, ratings and user preferences, habits and demographics; column 12, line 44-column 13, line 12, column 13, lines 48-58 and column 14, lines 13-58).

While Zigmond discloses information determining the next advertisement to inserted (selection criteria; Fig. 6, step 110) and inserting advertisements in accordance with said information (Fig. 6, step 110; column 17, lines 23-32), he fails to specifically disclose storing one or more queues, each queue associated with one or more subscribers, comprising an ordered list of advertisements and a plurality of queue slots, and inserting said unscheduled advertisements in accordance with said ordered list, identifying a repetition rate specified by an advertiser, wherein the repetition rate represents spacing between queue slots relative to previous queue slots in the queue, selling queue slots based at least partially on the specified repetition rate and wherein the sold specific queue slots at least partially determine the order of the ARLs in said ordered list.

In an analogous art, Doherty discloses a system for displaying targeted advertising (Fig. 1; paragraph 25, lines 1-6) wherein a scheduler (140, Fig. 1) will assemble and store a queue (the schedule; paragraph 29) comprising an ordered list of references (or ARLs) disclosing a location of a corresponding advertisement (paragraph 28, lines 3-7 and paragraph 29) and queue slots (paragraph 25), based upon advertisement priorities (paragraph 40), to determine the order in which advertisements are to be displayed (paragraph 38) wherein locations in the ordered list are sold to advertisers (advertisers pay a fee for their ads to be included and displayed; paragraphs 40, 46, 48 and 49) and wherein the sold locations at least partially determine the order of the ARLs in said ordered list (wherein advertisers pay to increase their ad priority and playback time; paragraphs 40, 46, 48 and 49) wherein the advertiser will specify a repetition rate for their advertisements (Fig. 3D, paragraph 50) representing the spacing between the playing of the advertisements (Fig. 3D; paragraph 50) for the typical benefit of allowing the system provider additional revenue while allowing advertisers to control the display of their advertisement as desired (paragraphs 40, 46, 48 and 49) and allowing the use of higher compression storage techniques while ensuring that advertisements are properly prepared when needed for output (paragraph 28, lines 1-11 and paragraph 38, lines 4-9).

It would have been obvious to one of ordinary skill in the art at the time of invention by applicant to modify Zigmond's system to include storing one or more queues, each queue associated with one or more subscribers, comprising an ordered list of advertisements and a plurality of queue slots, and inserting said unscheduled

advertisements in accordance with said ordered list, identifying a repetition rate
specified by an advertiser, wherein the repetition rate represents spacing between
queue slots relative to previous queue slots in the queue, selling queue slots based at
least partially on the specified repetition rate and wherein the sold specific queue slots
at least partially determine the order of the ARLs in said ordered list, as taught by
combination with Doherty, for the typical benefit of allowing the system provider
additional revenue while allowing advertisers to control the display of their
advertisement as desired and allowing the use of higher compression storage
techniques while ensuring that advertisements are properly prepared when needed for
output.

      As to claim 62, Zigmond and Doherty disclose wherein the order of the
advertisements in the queues are independent of the substance programming stream
(wherein the advertisements to be displayed are dependent upon the user's viewing
habits or demographics, and need not be dependent upon programming content; see
Zigmond at column 13, lines 7-13, column 14 lines 13-58 and column 17, lines 21-26).

      As to claim 63, Zigmond and Doherty disclose wherein each of the one or more
queues is associated with a channel in the programming stream (wherein the
advertisements to be displayed, and therefore the queue holding them, are dependent
upon, and therefore associated with, the current channel being viewed; see Zigmond at
column 12, lines 47-53).

As to claim 64, Zigmond and Doherty disclose wherein step (a) includes transmitting a plurality of channels within the programming stream and selecting one of said channels (see Zigmond at column 11, lines 15-18), and wherein step (e) includes inserting the advertisements (see Zigmond at column 15, lines 57-65) from a queue associated with the selected channel (wherein the advertisements to be displayed, and therefore the queue holding them, are dependent upon, and therefore associated with, the current channel being viewed; see Zigmond at column 12, lines 47-53) into the detected intervals in the selected channel (see Zigmond at column 15, lines 57-65).

As to claim 65, Zigmond and Doherty disclose wherein the queues are stored at the subscriber node (wherein the queue is locally generated and stored; see Doherty at Fig. 1-2, paragraph 29).

As to claim 68, Zigmond and Doherty disclose wherein said repetition rate is non-linear (wherein the ad is blocked after a set number of presentations, which stops the ad from repeating at the same rate, to prevent frustration from viewers; see Zigmond at column 13, lines 40-47).

As to claim 69, Zigmond and Doherty disclose (f) recording a portion of said programming stream for subsequent playback (see Zigmond at column 3, lines 9-12 and column 14, lines 1-12).

As to claim 70, Zigmond and Doherty disclose wherein the advertisements are inserted into said programming stream as the stream is being recorded (wherein the system inserts ads into the received stream being recorded whenever the indicator appears; see Zigmond at column 14, lines 1-12 and column 15, lines 45-65).

As to claim 71, Zigmond and Doherty disclose wherein the advertisements are inserted into said programming stream when the stream is played back (replacing older ads with newer ones in the recorded material; see Zigmond at column 14, lines 1-12).

As to claim 72, Zigmond and Doherty disclose wherein the advertisements are inserted into said programming stream (the current video stream being received and displayed) between the time the stream is recorded and the time it is played back (when a program is recorded and played back at a later time, such as the next day, the system would be continuing to insert ads into the received video stream during that time period; see Zigmond at column 17, lines 21-32).

As to claim 76, Zigmond and Doherty disclose wherein the inserted advertisement is not dependent on a selection of that advertisement (see Zigmond at column 16, line 65-column 17, line 9).

As to claim 77, Zigmond and Doherty disclose wherein the advertisements are not linked to the detected one or more intervals until the advertisement is inserted into the detected intervals (wherein the next ads are selected independent of the upcoming interval; see Zigmond at Fig. 6; column 17, lines 21-32).

As to claim 78, Zigmond and Doherty disclose wherein the order of the advertisements in the ordered list is independent of the substance of the advertisements in the queue (wherein the ads are selected based upon the advertisers desire to target particular demographics; see Zigmond at column 14, lines 35-58).

As to claim 95, Zigmond and Doherty disclose wherein the order of the advertisements is independent of the timing of the detected intervals (wherein ads are inserted based upon time independent information, such as program content, ratings and user preferences, habits and demographics; column 12, line 44-column 13, line 12, column 13, lines 48-58 and column 14, lines 13-58).

As to claim 104, Zigmond and Doherty disclose wherein a purchaser of the sold specific queue slot places his advertisement in a particular one of the queue slots (see Zigmond at column 14, lines 17-21).

As to claim 105, Zigmond and Doherty disclose wherein the each of the sold specific queue slots has a position within the queue known to the purchaser of the slot at the time of purchase (see Zigmond at column 14, lines 17-21).

Claims 3-6 and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Zigmond and Doherty as applied to claims 2, 20, 39 and 51 above, and further in view of Bhagavath.

As to claim 3, while Zigmond and Doherty disclose indicators for upcoming avails and ARLs corresponding to advertisements, they fail to specifically disclose identifying a duration of said avail and identifying a duration of said advertisement.

In an analogous art, Bhagavath discloses a system for insertion advertisements into media (column 1, lines 65-67 and column 2, lines 1-10) which will provide media metadata (Fig. 10) indicating intervals when ads are to be inserted and the duration of the ad interval (column 6, lines 44-48) and ad metadata (Fig. 9A) defining a duration of an ad (column 6, lines 25-31) and wherein a particular ad is chosen by comparing the two types of data (column 6, lines 18-24) for the typical benefit of ensuring that a selected ad will fit into a particular ad slot.

It would have been obvious to one of ordinary skill in the art at the time of invention by applicant to modify Zigmond and Doherty's system to include identifying a duration of said avail and identifying a duration of said advertisement, as taught by Bhagavath, for the typical benefit of selecting an advertisement of appropriate duration for any particular ad slot.

As to claim 4, Zigmond, Doherty and Bhagavath disclose wherein said order of

said ARLs in said queue is based at least partially on said duration of said

advertisements relative to said duration of avails detected in said stream (based upon a

comparison of an ad duration and an ad slot duration; see Bhagavath at column 6, lines

18-21, 29-31 and 44-48).

As to claim 5, Zigmond, Doherty and Bhagavath disclose

(h) determining at least one characteristic of a viewer of said television

programming (determining user preferences; see Zigmond at column 11, lines 13-19

and lines 24-30); and

(i) ordering said queue based at least partially on said at least one characteristic

(wherein the ad selections are based upon the viewer data; see Zigmond at column 11,

lines 13-19 and lines 42-49).

As to claim 6, Zigmond, Doherty and Bhagavath disclose wherein said at least

one characteristic is based on the content of the programming stream prior to said

interval (wherein the determined user characteristic at any particular interval is

inherently based on viewing habits prior to the interval; see Zigmond at column 11, lines

13-18).

As to claim 9, Zigmond, Doherty and Bhagavath disclose

(h) receiving at said receiving node instructions (selection rules and parameters; see Zigmond at column 11, lines 66-67 and column 12, lines 1-14 and lines 25-32) dictating how to order said ARLs in said queue (dictating the selection of advertisements; see Zigmond at column 11, lines 35-49); and

wherein step (c) includes ordering said queue in accordance with said instructions (wherein the advertisements are selected from the queue for use based upon the context info for the ads; see Doherty at Fig. 2, paragraph 40-52).

(10) Response to Argument

On pages 12-15, appellant argues that Zigmond does not teach or suggest "selling specific slots".

In response to appellant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986).

Neither Zigmond nor Doherty were individually relied upon to disclose this limitation, as it is taught by the combination of the two references.

Zigmond discloses an advertisement system where individual advertisements are each selected based upon the current conditions (selecting the next ad to be displayed; column 17, lines 21-32). Zigmond further discloses where an advertiser can ensure that

their advertisement is selected for display directly after a competitor's ad (column 14, lines 13-24).

Doherty discloses an advertisement system wherein a plurality of advertisements are selected to be displayed in order (i.e. in slots within a list; see Fig. 2; paragraph 25) based upon the current conditions (see paragraph 25 and paragraphs 38-47).

Thus, the *combination* of Zigmond and Doherty would clearly provide for creating a queue of ad slots (ad schedule as taught by Doherty), where an advertiser is sold a specific queue slot (as the advertiser can decide when their ad is displayed relative to another ad, see Zigmond at column 14, lines 13-24).

An advertiser who desires to have their advertisement shown after a competitor's would be paying to have that specific slot in the schedule filled with their advertisement. This clearly meets the claim limitations.

Furthermore, it is noted that while the claims recite "selling specific queue slots", there are no requirements as to how the slots are selected/sold to the advertisers. As the combination of Zigmond and Doherty results in advertisers paying to have their ad included within the schedule (see Doherty at paragraph 48 and Zigmond at column 1, lines 36-43), every individual slot within the schedule has been sold, meeting the broad claim limitations. For example, in a schedule including 5 advertisements, slots 1-5 have all been sold, as the advertisers paid to have their ads included in the schedule and displayed. Each specific slot, "slot 1", "slot 2", "slot 3", "slot 4" and "slot 5" was sold to

the advertiser who's ad was inserted into that slot. By having their ads set into specific positions within the schedule, the advertisers have been sold those specific slots.

On pages 14-15, appellant argues that Doherty does not teach selling specific slot in a queue.

In response, as indicated above, Doherty was not relied upon to individually disclose this limitation, as it is taught by the combination of Zigmond and Doherty which meet the current claim limitations.

On pages 15-16, appellant argues that the combination of Zigmond and Doherty do not teach or suggest "selling specific queue slots".

In response, as indicated above, neither Zigmond nor Doherty were individually relied upon to disclose this limitation, as it is taught by the combination of the two references.

Zigmond discloses an advertisement system where individual advertisements are each selected based upon the current conditions (selecting the next ad to be displayed; column 17, lines 21-32). Zigmond further discloses where an advertiser can ensure that their advertisement is selected for display directly after a competitor's ad (column 14, lines 13-24).

Doherty discloses an advertisement system wherein a plurality of advertisements are selected to be displayed in order (i.e. in slots within a list; see Fig. 2; paragraph 25) based upon the current conditions (see paragraph 25 and paragraphs 38-47).

Thus, the *combination* of Zigmond and Doherty would clearly provide for creating a queue of ad slots (ad schedule as taught by Doherty), where an advertiser is sold a specific queue slot (as the advertiser can decide when their ad is displayed relative to another ad, see Zigmond at column 14, lines 13-24).

An advertiser who desires to have their advertisement shown after a competitor's would be paying to have that *specific* slot in the schedule filled with their advertisement. This clearly meets the claim limitations.

Furthermore, as shown above, it is noted that while the claims recite "selling specific queue slots", there are no requirements as to how the slots are selected/sold to the advertisers. As the combination of Zigmond and Doherty results in advertisers paying to have their ad included within the schedule (see Doherty at paragraph 48 and Zigmond at column 1, lines 36-43), every individual slot within the schedule has been sold, meeting the broad claim limitations. For example, in a schedule including 5 advertisements, slots 1-5 have all been sold, as the advertisers paid to have their ads included in the schedule and displayed. Each specific slot, "slot 1", "slot 2", "slot 3", "slot 4" and "slot 5" was sold to the advertiser who's ad was inserted into that slot. By having their ads set into specific positions within the schedule, the advertisers have been sold those specific slots.

On pages 16-17, appellant argues that the combination does not teach "insertion in accordance with the ordered list".

In response, Zigmond discloses that ad selection is based upon the content of recent ads, such as allowing a competitor to display their ad directly after a competitor's ad (column 14, lines 13-23).

Doherty discloses creating an ad schedule by adding one ad after another into the schedule (Fig. 2). Each individual ad is selected based upon the viewing conditions for that ad (Fig. 2; paragraph 25, 37-47). Thus, as Doherty discloses selecting each ad individually based upon the viewing conditions of that individual advertisement and Zigmond discloses using previous ads to select the next ad to display, they clearly meet the claim limitations.

For example, consider if a Ford commercial was selected to be the first ad within the schedule. Ad selection is based upon the content of recent ads, so as to ensure that a competing Honda commercial is shown directly after the Ford commercial. Thus, the selection of Ford for the first slot in the schedule has determined the order of the rest of the list, as the selection of a Ford commercial resulted in a competitor's commercial for the next slot.

Appellant argues that Zigmond's system already selects ads "on demand" and thus would be rendered inoperable by requiring a schedule instead of an "on demand" process.

In response, it is noted that Zigmond's system does not operate in an "on demand" manner, as appellant suggests.

As seen in Fig. 6, steps 110 and 112, and column 17, lines 21-31, the system will select advertisements *in advance* of their display time. The ads are *not* selected "on demand" as one advertisement will selected prior to the insertion time and scheduled to be inserted at the next ad space.

The difference in scheduling between Zigmond and Doherty is in *the number* of ads which are selected in advance. Zigmond disclose selecting one ad in advance, while Doherty discloses selecting plural ads in advance. This listing of advertisements allows the system to utilize greater compression techniques providing the advertisement data in more compact size (paragraph 28) and while ensuring the advertisements are compiled and ready for display in time (paragraph 28 and 55). Thus, one or ordinary skill in the art would have been clearly motivated to combine Zigmond and Doherty's system, as both systems provide for targeted advertisements wherein advertisers may pay to control the presentation of their advertisement, and would enable more efficient storage/retrieval of the advertisements.

In response to appellant's arguments in regards to the motivation to combine Zigmond and Doherty and "common sense", Zigmond discloses a system wherein an advertisement is selected in advance of the time the advertisement is to be displayed (Fig. 6, steps 110-116; column 17, lines 21-32). Doherty discloses a system wherein multiple advertisements are selected and ordered for display in advance of the time the advertisements are to be displayed (paragraph 24). This listing of advertisements allows the system to utilize greater compression techniques providing the advertisement

data in more compact size (paragraph 28) and while ensuring the advertisements are

compiled and ready for display in time (paragraph 28 and 55). Thus, one or ordinary

skill in the art would have been clearly motivated to combine Zigmond and Doherty's

system, as both systems provide for targeted advertisements wherein advertisers may

pay to control the presentation of their advertisement, and would enable more efficient

storage/retrieval of the advertisements.

Further, it is noted that lack of storage is a problem acknowledged by Zigmond

(column 15, lines 17-23), as it would require additional filtering and processing steps to

decrease the ads stored within the receiver. The use of Doherty's queue system allows

the use of greater compression techniques, which would overcome this shortcoming

and reduce the storage and bandwidth required for ads.

On pages 19-21, appellant argues that Zigmond teaches away from Doherty as

he "considered a system wherein multiple pre-selected advertisements are to be

displayed, but specifically did not follow this concept in his invention".

In response, it is noted that Fig. 2A is merely representative a broadcast stream

being transmitted by a national broadcaster (column 2, line 64-column 3, line 6). It is

indicated as showing a local broadcaster inserting a local ad into an "occasional time

slot" (column 3, lines 2-6). While appellant argues that this is representative of "multiple

pre-selected advertisements", it is noted that the figure is simply showing the display of

multiple advertisements, one after another, within a program stream. The method used

to select the ads is immaterial, as either method would result in the same stream shown

within the figure. If the commercial break has room for 4 commercials, then the viewer

will receive a program stream with 4 commercials, as shown in the figure, regardless of

how the commercials were selected. Zigmond desire was to move the ad selection

process to a more local level than previous systems (such as that shown in Figs. 2A-B;

column 3, line 58-column 4, line 3). This desire is completely unrelated to the

combination of references affecting how many ads are selected at a time.

In response to appellant's arguments on pages 21-22, regarding the arguments

presented in the previous declarations, it is noted that all of these same arguments

(non-obviousness, inoperative, not meeting the claim limitations) were all previously

presented and rebutted above.

In response to the argument on pages 22-23, that the claimed subject matter

solved a problem that was a long felt need in the art. However, there is no showing that

others of ordinary skill in the art were working on the problem and if so, for how long. In

addition, there is no evidence that if persons skilled in the art who were presumably

working on the problem knew of the teachings of the above cited references, they would

still be unable to solve the problem.

See MPEP §716.04

In response to appellant's arguments on pages 23-24, see above where it has

been repeatedly shown how the combination of Zigmond and Doherty meet the claim

limitations of selling specific queue slots. Furthermore, Doherty discloses where the advertisers can specify a "ramp profile" which would be guaranteed to be displayed with an average period approaching that of the ramp profile (Fig. 3D; paragraph 50). As the claim limitations only require the queue slots to be sold (as shown above) based *partially* on the specified repetition rate, Doherty clearly discloses this limitation. The display of the advertisements would be *partially* based on the specified repetition rate, as the increasing priority would guarantee the commercial to be repeated at an average rate.

(11) Related Proceeding(s) Appendix

Copies of the court or Board decision(s) identified in the Related Appeals and Interferences section of this examiner's answer are provided herein.

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

/James Sheleheda/

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